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**Borgward**

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(54) **DIGITAL BOOK**

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4,839,634	A *	6/1989	More et al.	345/173
4,912,671	A *	3/1990	Ishida	704/3
5,027,394	A	6/1991	Ono et al.	
5,049,862	A *	9/1991	Dao et al.	345/179
5,063,600	A *	11/1991	Norwood	382/186
5,128,672	A	7/1992	Kaehler	
5,194,852	A *	3/1993	More et al.	345/182

(Continued)

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#### FOREIGN PATENT DOCUMENTS

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DE	19546786	A1	6/1997
EP	0795810	A2	9/1997

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See application file for complete search history.

(56) **References Cited**

#### U.S. PATENT DOCUMENTS

4,005,388	A	1/1977	Morley et al.	
4,159,417	A *	6/1979	Rubincam	235/375

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(57)

#### ABSTRACT

A digital book comprising a casing which is adapted to be folded open and shut like a book and which has at least one folding axis (A), a main part (1) and at least one secondary part (2), said parts together forming a book back part (BR). A display unit consists of at least two parts and is arranged in such a way that when the casing is folded out, the main part (1) and the at least one secondary part (2) are each presented to the user with at least one screen each, like pages of a book, for looking at or optionally, for working on as required. The digital book contains a control unit with means for receiving, storing, processing and reproducing information, and at least one operating unit (6) with operating elements for using the digital book as a device for receiving/processing/reproducing information. Furthermore, there is provided a supply unit (VE) which is designed such that it has a receiving opening (VE') and a guide and supply pin (7), by means of which the digital book can be plugged in when the casing is folded shut, for inputting and outputting information, for supplying energy and for storing the digital book.

